

DEFINITIONS OF TECHNICAL TERMS

Term	Definition
acre-foot	The volume of water that would cover 1 acre to a depth of 1 foot, or 325,851 gallons of water. On average, 1 acre-foot could supply one to two households with water for a year. A flow of 1 cubic foot per second for a day is approximately 2 acre-feet.
adequately conserved	To use, and the use of, conservation methods and procedures that are adequate to protect and perpetuate a species of fish, plant, or wildlife within the Focus Area, taking into consideration the whole of CALFED, including the direct and indirect effects of CALFED actions.
anadromous fish	Fish that spend a part of their life cycle in the sea and return to freshwater streams to spawn.
Bay-Delta	The San Francisco Bay/Sacramento-San Joaquin Delta estuary.
Best Management Practices	A water conservation measure that the California Urban Water Conservation Council agrees to implement among member agencies. The term is also used in reference to water quality standards and watershed management activities.
biological opinion	A written statement setting forth the opinion of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service as to whether or not a federal action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat. See 16 USCA 1536(b).
CALFED Bay-Delta Program	A consortium of 15 State and federal agencies with management or regulatory responsibilities in the Bay-Delta.

candidate species	Any species being considered by the U.S. Secretary of the Interior or Secretary of Commerce for listing as an endangered or a threatened species, but not yet the subject of a proposed rule (see 50 CFR 424.02), or any species accepted as a candidate species by the California Fish and Game Commission pursuant to Fish and Game Code Section 2074.2.
Central Valley Project	A federally operated water management and conveyance system that provides water to agricultural, urban, and industrial users in California. The Central Valley Project was originally authorized by legislation in 1937.
Central Valley Project Improvement Act	Public Law 102-575, Title 34, 106 Stat. 4600. Federal legislation, signed into law on October 30, 1992, that governs the federal Central Valley Project. The Central Valley Project Improvement Act puts fish and wildlife on an equal footing with agricultural, municipal, industrial, and hydropower water users.
California Endangered Species Act (CESA)	California legislation that prohibits the “take” of plant and animal species designated by the California Fish and Game Commission as either endangered or threatened. Take includes hunting, pursuing, catching, capturing, killing, or attempting such activity. CESA provides the California Department of Fish and Game (DFG) with administrative responsibilities over the plant and wildlife species listed under the State act as threatened or endangered. CESA also provides DFG with the authority to permit the take of State-listed species under certain circumstances. See Fish and Game Code 2050–2116.

California Environmental Quality Act
(CEQA)

California legislation that requires State, regional, and local agencies to prepare environmental impact assessments of proposed projects with significant environmental effects and to circulate these documents to other agencies and the public for comment before making decisions. CEQA requires the lead agency to make findings for all significant impacts identified in the environmental impact report (EIR). The lead agency must adopt all mitigation to reduce environmental impacts to a less-than-significant level unless the mitigation is infeasible or unavailable and there are overriding considerations that require the project to be approved. See Public Res. Code 21001.1, 21002, 21080; Guidelines 15002(c).

channel islands

Natural, unvegetated land masses within Delta channels that are typically good sources of habitat.

conserve, conserving, conservation

To use, and the use of, all methods and procedures necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the federal and California Endangered Species Acts are no longer necessary. These methods and procedures include, but are not limited to, all activities associated with scientific resources management, such as research, census, law enforcement, habitat acquisition, restoration and maintenance, propagation, live trapping, and transplantation. In the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, the methods and procedures may include regulated taking.

“contribute to recovery”

Also referred to as “r”, a goal assigned to evaluated species where CALFED actions affect only a limited portion of the species range and/or CALFED actions have limited effects on the species. The goal of contributing to a species’ recovery means that CALFED will undertake the actions under its control and within its Multi-Species Conservation Strategy Problem Area and scope that are necessary to recover the species.

conveyance

A pipeline, canal, natural channel, or other similar facility that transports water from one location to another.

covered species	At a programmatic level, species selected from the evaluated species that would be adequately conserved (State requirement for State-covered species) and for which programmatic CALFED actions would not cause jeopardy and/or adversely affect designated critical habitat (federal requirement for federally covered species).
critical habitat	Designation for federally listed species. Consists of: (1) the specific areas within the geographical area occupied by the species at the time it is listed in accordance with the provisions of Section 4 of the federal Endangered Species Act (FESA) (16 USCA 1533), on which are found those physical or biological features (constituent elements) that (a) are essential to the conservation of the species and (b) may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of Section 4 of FESA (16 USCA 1533), upon a determination by the Secretary that such areas are essential for the conservation of the species. (16 USCA 1532(5)(A).) Designated critical habitats are described in 50 CFR 17 and 50 CFR 226.
cumulative impact	The incremental impact or effect of the action together with impacts of past, present, and reasonable foreseeable future actions (regardless of the source of these other actions).
Delta Cross Channel	Existing gated structure and channel connecting the Sacramento River at Walnut Grove to Snodgrass Slough and thence to the North Fork Mokelumne River. The facility was constructed as part of the Central Valley Project to control movement of Sacramento River water into the central Delta and to the south-Delta export pumps. Operating criteria currently require the gates to be closed for specific periods to keep downstream-migrating fish in the Sacramento River and to prevent flooding of the central Delta.
Delta islands	Islands in the Sacramento-San Joaquin Delta protected by levees. Delta islands provide space for numerous functions including agriculture,

Delta islands (cont'd)	communities, and important infrastructure such as transmission lines, pipelines, and roadways.
ecosystem	A recognizable, relatively homogeneous unit that includes organisms, their environment, and all the interactions among them.
ecosystem restoration	A term sometimes used to imply the process of recreating the structural and functional configurations of an ecosystem to that present at some agreed to time in the past. Because the structure and function of many elements of the Bay-Delta ecosystem have been severely disrupted and cannot be feasibly restored to a specified historic condition, within the context of CALFED, ecosystem restoration is more realistically defined as the process by which resource managers ensure that the capacity of the ecosystem to provide ecological outcomes valued by society is maintained, enhanced, or restored.
emergent	A plant rooted in shallow water that has most of its vegetative growth above water.
endangered species (California Endangered Species Act)	Any species listed as endangered under the California Endangered Species Act. Endangered species are native California species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that has been determined by the California Fish and Game Commission to be in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease. See California Fish and Game Code Section 2062.
endangered species (federal Endangered Species Act)	Any species listed as endangered under the federal Endangered Species Act or the California Endangered Species Act. Endangered species are any species (including subspecies or qualifying distinct population segment) which is in danger of extinction throughout all or a significant portion of its range. See 16 USCA 1532(6).
endemic species	A native species or subspecies confined naturally to a particular, and usually restricted, area or region.

environmental impact report	A detailed written report, required by the California Environmental Quality Act, analyzing the environmental impacts of a proposed action, adverse effects that cannot be avoided, alternative courses of action, and cumulative impacts.
environmental impact statement	A detailed written statement, required by Section 102(2)(c) of the National Environmental Policy Act, analyzing the environmental impacts of a proposed action, adverse effects that cannot be avoided, alternative courses of action, short-term uses of the environment versus the maintenance of long-term productivity, and any irreversible and irretrievable commitment of resources.
ephemeral stream	A stream that flows seasonally.
estuary	A water passage where ocean water mixes with river water.
estuarine fish	Fish that spend a part of their life cycle in an estuary.
evaluated species	A species within the Multi-Species Conservation Strategy Focus Area that is listed under federal law as threatened or endangered or California listed as rare, threatened, endangered, or fully protected; could become federally or California listed as threatened or endangered under California or federal law during the term of CALFED implementation and could be adversely affected by CALFED actions; or could be adversely affected by CALFED actions within a substantial portion of the species' range or important habitat.
facultative	Not limited to a specific condition; having the ability to live under varying conditions, such as in wetland and upland habitats.
federal Endangered Species Act (FESA)	Federal legislation that requires federal agencies, in consultation with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS), to ensure that their actions do not jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of these species. FESA recognizes the value to the nation of species in danger of or threatened with extinction. The act

federal Endangered Species Act (cont'd)	<p>requires federal agencies to conserve these species and their habitats and ranges to the extent practicable. Section 4 of FESA (16 USCA 1533) provides a listing process for species considered “endangered” (in danger of becoming extinct) or “threatened” (threatened to become endangered). The Secretary of Commerce, acting through NMFS, is involved for projects that may affect marine or anadromous fish species listed under FESA. All other species listed under FESA are under USFWS jurisdiction. Section 7 of FESA (16 USCA 1536(a)(2)) requires all federal agencies, in consultation with the Secretaries of the Interior and Commerce (acting through USFWS and NMFS, respectively), to ensure that their actions do not jeopardize the continued existence of species listed as endangered or threatened and protected or result in the destruction or adverse modification of the critical habitat of these species. Section 9 of FESA (16 USCA 1538) prohibits take of a listed species. Section 9 (16 USCA 1538) compliance is applicable if the proposed action would result in the take of any listed threatened (if not subject to special rule) or endangered fish or wildlife species and such take is not authorized in a biological opinion issued by USFWS or NMFS. Section 10 of FESA (16 USCA 1539) authorizes the conditions for USFWS or NMFS to issue a permit for incidental take of a listed species when there is no other federal agency involved. See 16 USC 1531 <i>et seq.</i></p>
federally covered species	<p>Federally listed and proposed species identified by USFWS and NMFS in the programmatic biological opinions for which programmatic CALFED actions would not cause jeopardy and/or adversely affect designated critical habitat.</p>
fish group	<p>A classification that is based on ecological behavior of the included fish species. Two fish groups are evaluated in the Multi-Species Conservation Strategy: anadromous fish and estuarine fish.</p>
Focus Area	<p>The legally defined Delta, Suisun Bay and Marsh, the Sacramento and San Joaquin Rivers and their tributaries downstream of major dams, and the potential locations of conveyance and water storage facilities.</p>

habitat conservation plan	A comprehensive planning document pursuant to Section 10 of the federal Endangered Species Act (16 USCA 1539(a)(2)(A)) that is a mandatory component of an incidental take permit issued pursuant to Section 10 (16 USCA 1539(a)(1)(B)).
habitat enhancement, enhance habitat	To improve degraded habitat. Management actions that enhance habitat do not result in increasing the extent of habitat area.
habitat protection, protect habitat	To maintain the existing extent and quality of habitat.
habitat restoration, restore habitat	To create habitat. Management actions that restore habitat result in increasing the extent of habitat area.
incidental take	“Take” that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.
incidental take permit	Federal exception to Section 9 of the federal Endangered Species Act (FESA) (16 USCA 1538); a permit issued pursuant to Section 10 of FESA (16 USCA 1539(a)(1)(B)).
invertebrate	An animal that lacks a backbone or spinal column.
listed species (federal Endangered Species Act)	Species, including subspecies, of fish, wildlife, or plants federally listed at 50 CFR 17.11 and 50 CFR 17.12 as either endangered or threatened, or listed at 14 CCR 670.2 and 14 CCR 670.5 as threatened or endangered.
listed species (California Endangered Species Act)	Species or subspecies declared as threatened or endangered by the California Fish and Game Commission in 14 CCR 670.5.
“maintain”	Also known as “m”, a type of CALFED goal assigned to species expected to be minimally affected by CALFED actions. The MSCS requires that CALFED actions’ adverse effects on species in this category be avoided, minimized, or compensated for. The avoidance, minimization, and compensation measures for these species may not contribute to their recovery, but would ensure that CALFED actions do not degrade the status of the species or contribute to the need to list the species. CALFED is also expected, where practicable, to take advantage of opportunities to improve conditions for these species.

mitigation	To moderate, reduce, alleviate the impacts of a proposed activity; includes in order: (a) avoiding the impact by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and (e) compensating for the impact by replacing or providing substitute resources or environments.
National Environmental Policy Act	Federal legislation establishing the national policy that environmental impacts will be evaluated as an integral part of any major federal action. Requires the preparation of an environmental impact statement for all major federal actions significantly affecting the quality of the human environment.
Natural Community Conservation Plan	A plan prepared pursuant to the Natural Community Conservation Planning Act that identifies and provides for the regional or areawide protection and perpetuation of natural wildlife diversity, while allowing compatible and appropriate development and growth.
Natural Community Conservation Planning Act	A California law providing for regional or areawide planning for natural wildlife diversity and compatible and appropriate development and growth. (See Fish and Game Code 2800 <i>et seq.</i>)
NCCP community	Refers to both habitats and fish groups addressed in the Multi-Species Conservation Strategy (MSCS). The MSCS provides the information for a programmatic Natural Community Conservation Plan (NCCP) for 20 natural communities, encompassing 18 habitat types and two ecologically based fish groups.
NCCP community goals	CALFED goals developed by the Multi-Species Conservation Strategy team and Ecosystem Restoration Program staff for Natural Community Conservation Plan (NCCP) communities.

NCCP community prescriptions	Multi-Species Conservation Strategy (MSCS) targets that describe the future expected changes in extent and condition of MSCS Natural Community Conservation Plan (NCCP) communities with full implementation of CALFED. If NCCP community prescriptions are achieved, CALFED goals for NCCP communities will have been met.
NCCP habitat	Broad habitat categories, each of which includes a number of habitat or vegetation types recognized in frequently used classification systems. The Multi-Species Conservation Strategy includes an evaluation of 18 Natural Community Conservation Plan (NCCP) habitats.
obligate species	A species limited to a restricted environment, such as a wetland.
perennial plant	A plant that grows for more than one season; it overwinters in a dormant condition and resumes growth the following season.
Phase I	First phase of CALFED. During Phase I, begun in May 1995, when the problems of the Bay-Delta were defined and work began on developing a range of alternatives to solve them. Phase I was completed by CALFED in August 1996.
Phase II	Second phase of CALFED. This is CALFED's current phase, which will end at the time of the Final Programmatic Environmental Impact Statement/Environmental Impact Report. In Phase II, CALFED is developing a Preferred Program Alternative, conducting comprehensive programmatic environmental review, and developing the implementation plan focusing on the first 7 years (Stage 1) following the Record of Decision.
Phase III	Third and final phase of CALFED. During Phase III, implementation of the Preferred Program Alternative will begin. Implementation will continue in stages over many years. This phase will include any necessary studies and site-specific environmental review and permitting.
practicable	Capable of being put into practice, done, or accomplished using reasonable means and costs.

raptor	A bird species in the order Falconiformes such as hawks, eagles, kites, and falcons, and in the order Strigiformes (owls).
“recovery” (CALFED goal)	Also referred to as “R”, a goal assigned to evaluated species whose recovery is dependent on restoration of the Delta and Suisun Bay/Marsh ecosystems and for which CALFED could reasonably be expected to undertake all or most of the actions necessary to recover the species. The term “recover” means that the decline of a species is arrested or reversed and threats to the species are neutralized and that the species’ long-term survival in nature is therefore assured.
recovery (federal Endangered Species Act)	The process by which the decline of an endangered or threatened species is arrested or reversed, and threats to survival are neutralized, so that long-term survival in nature can be ensured.
riparian	The strip of land adjacent to a natural watercourse such as a river or stream. Often supports vegetation that provides important wildlife habitat values when a complex forest structure is present and important fish habitat values when vegetation grows large enough to overhang the bank.
riverine habitat	Habitat within or alongside a river or channel.
Section 7	Section of the federal Endangered Species Act (16 USCA 1536) dealing with the requirement that federal agencies consult with the U.S. Fish and Wildlife Service or National Marine Fisheries Service to ensure that any action authorized, funded, or carried out by a federal agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species.
Section 9	Section of the federal Endangered Species Act (16 USCA 1538) that defines prohibited acts, including the “take” of any listed species without specific authorization of the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

Section 10	Section of the federal Endangered Species Act (FESA) (16 USCA 1539) that defines exceptions to acts prohibited by Section 9 of FESA (16 USCA 1538) for nonfederal entities (e.g., states, local governments, private individuals).
sensitive species	Listed species, species that are candidates for listing, and other species that have been designated as species of special concern by federal or State agencies or scientific organizations (see “special-status species”).
service area	All of the areas that receive water from a particular water project.
special-status species	Species that are in at least one of the following categories: federally listed as threatened or endangered under the federal Endangered Species Act (FESA); proposed for federal listing under FESA; federal candidates under FESA; California listed as threatened or endangered under the California Endangered Species Act (CESA); California candidates under CESA; plants listed as rare under the California Native Plant Protection Act; California fully protected species or specified birds under various sections of the California Fish and Game Codes; California species of special concern; California Native Plant Society List 1A, 1B, 2, or 3 species; or other native species of concern to CALFED.
species	Species of fish, wildlife, or plants, any subspecies of fish, wildlife, or plants, and any distinct population segment of vertebrate fish or wildlife that interbreeds when mature. The California Endangered Species Act also includes any native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant.
species goal	CALFED goals developed by the Multi-Species Conservation Strategy Team and the Ecosystem Restoration Program staff for the evaluated species, termed “recovery”, “contribute to recovery”, and “maintain”.
species of concern	Species evaluated in the Multi-Species Conservation Strategy that could be affected by actions and are not federally listed as threatened or endangered under the federal Endangered Species Act (FESA); proposed for

species of concern (cont'd)	federal listing under FESA; federal candidates under FESA; California listed as threatened or endangered under the California Endangered Species Act (CESA); California candidates under CESA; plants listed as rare under the California Native Plant Protection Act; California fully protected species or specified birds under various sections of the California Fish and Game Codes; California species of special concern; or California Native Plant Society List 1A, 1B, 2, or 3 species.
species prescriptions	Multi-Species Conservation Strategy targets that describe the future expected changes in evaluated species' habitats and populations with full implementation of CALFED. If evaluated species prescriptions are achieved, CALFED goals for evaluated species will have been met.
stage	The height of the water surface above an arbitrarily established elevation.
Stage 1	The first 7 years of CALFED implementation following the Record of Decision on the CALFED Programmatic Environmental Impact Statement/Environmental Impact Report.
State-covered species	Evaluated species identified by DFG in the programmatic NCCP determination that would be adequately conserved with the implementation of programmatic CALFED actions and conservation measures.
State Water Project	A California State water conveyance system that pumps water from the Delta for agricultural, urban domestic, and industrial purposes. The State Water Project was authorized by legislation in 1951.
subsidence	The reduction in land elevation due to the compaction of soil, oxidation of organic soils, removal of underground fluids, or other mechanisms.
take	Under the federal Endangered Species Act (FESA), "To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" regard to federally listed, endangered species of wildlife (16 USCA 1532[19]). "Harm" is further defined as an act "which actually kills or

take (cont'd)	injures". Harm may include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter" (50 CFR 17.3). Under the California Fish and Game Code, take is defined as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (California Fish and Game Code Section 86).
threatened species (California Endangered Species Act)	Any species listed as threatened under the California Endangered Species Act. Threatened species are native California species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that have been determined by the California Fish and Game Commission, although not presently threatened with extinction, to be likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts. See California Fish and Game Code Section 2067.
threatened species (federal Endangered Species Act)	Any species listed as threatened under the federal Endangered Species Act (FESA). Threatened species are any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range (see 16 USCA 1532(19)).
turbidity	A cloudy appearance that results when excessive silt or other substances are in the water.
vernal pool	Seasonally ponded landscape depressions in which water accumulates because of limitations to subsurface drainage and which support a distinct association of plants and animals.
water transfers	Voluntary water transactions conducted under State law and in keeping with federal regulations.
Watershed Program Area	The area that encompasses the watersheds of the CALFED Solution Area, but focuses on the watersheds of the San Joaquin and Sacramento Rivers, primarily those areas above major dams, and a portion of the upper Trinity River watershed.